

REMARKS

Claims 2, 4, 8-11 are amended and claims 13-14 are added herein. Claims 2 and 4-14 remain pending in the captioned case. Further examination and reconsideration of the presently claimed application are respectfully requested.

Section 103 Rejections

Claims 2, 6-8, and 12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,264,795 to Rider (hereinafter “Rider”) in view of U.S. Patent No. 4,193,123 to Meinke (hereinafter “Meinke”). Claims 4 and 9-11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Rider and Meinke in view of U.S. Patent No. 5,437,057 to Richley et al. (hereinafter “Richley”) and U.S. Patent No. 6,611,776 to Waters et al. (hereinafter “Waters”). Claim 5 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Rider, Meinke, Richley, and U.S. Patent No. 5,914,959 to Marchetto et al. For the purpose of brevity, only the patentability of independent claims 2 and 8 are discussed below.

Rider and Meinke fail, both alone and in combination, to disclose a controller that converts a data rate or data package size of a data source into a desired value of data rate or data package size, wherein the desired value of data rate or data package size is dynamically adapted by the controller based on a position of the first and second units relative to each other or based on a point of time. Prior to the amendment made herein, independent claim 2 described a first unit having a controller that is coupled between a data source and a transmitter for controlling a serial data stream sent from the data source. That controller was configured to convert a data rate or data package size of the serial data stream from the data source into a desired value of data rate or data package size.

On page 7 of the final Office Action, the Examiner admits that “Rider does not expressly disclose converting a data rate or data package size of said data source into a desired value of

data rate or data package size.” However, the Examiner suggests that Rider (column 10, lines 4-45; column 12, lines 55-63) provides teaching for processing/modulating the serial data stream from a data source with a default baud rate, and therefore concludes that it would have been obvious to one of ordinary skill in the art to recognize that the data rate of Rider’s source does change in the processing through the transmitter (final Office Action – pg. 7). The Examiner then relies on Meinke’s brief teaching (column 1, lines 12-19) of data rate conversion to suggest that it would also have been obvious to one of ordinary skill in the art to incorporate the data rate conversion taught by Meinke into the alleged “converters” of Rider in order to provide an interface between arrangements that operate at different rates (final Office Action – pp. 7-8).

Although Applicant’s do not believe that Rider and Meinke provide adequate teaching or suggestion for the controller, as recited in the previously presented claim, claim 2 is amended to expedite prosecution and to more clearly distinguish the presently claimed system over that which is taught by Rider and Meinke.

As currently amended, claim 2 makes clear that the desired value of data rate or data package size is dynamically adapted by the controller based on a position of the first and second units relative to each other or based on a point of time. The controller achieves such dynamic adaptation by comprising means for storing a transmission function, which serves to adapt the desired value of data rate or data package size in a dynamic manner based on the position of the first and second mobile units relative to each other or based on the point of time. Support for the amendment made to claim 2 may be found, e.g., on page 4, lines 23-32, page 5, lines 16-25, and page 7, lines 1-14 of the present specification. As such, the amendment does not introduce new matter.

Although Rider briefly mentions that the “microcontroller 111 programs its internal SCI for the correct data format, baud rate, etc.” (col. 12, lines 60-61), Rider fails to provide any indication as to how the “correct” baud rate is selected. Contrary to present claim 2, Rider fails to provide teaching or suggestion for dynamically adapting the data rate or data package size of

a serial data stream based on the position of the first and second mobile units relative to each other or based on the point of time, as required by present claim 2. Rider provides even less incentive for storing a transmission function within the controller for achieving such dynamic adaptation. As a consequence, Rider fails to provide teaching or suggestion for the presently claimed controller.

Meinke states “[i]n the digital communication field, data rate converters are frequently used to provide an interface between arrangements which must intercommunicate but which operate at different rates” (Meinke – col. 1, lines 12-15). While Meinke suggests the need for converting data rate between arrangements that operate at different rates, Meinke fails to provide teaching or suggestion for dynamically adapting the data rate or data package size of a serial data stream based on the position of the first and second mobile units relative to each other or based on the point of time, as required by present claim 2. Furthermore, Meinke fails to provide any teaching or suggestion for storing a transmission function within the controller for achieving such dynamic adaptation. Thus, even if the “data rate conversion” taught by Meinke were incorporated into the alleged “converters” of Rider, as suggested on page 8 of the final Office Action, such incorporation would not result in a controller as recited in present claim 2.

Rider and Meinke fail, both alone and in combination, to disclose a method (claim 8) whereby a serial data stream is controlled by dynamically adapting a data rate or data package size of the serial data stream into a desired value of data rate or data package size based on a position of the first and second units relative to each other or based on a point of time. To expedite prosecution, the method recited in claim 8 is amended in a manner similar to claim 2. Support for the amendment made to claim 8 may be found, e.g., on page 4, lines 23-32, page 5, lines 16-25, and page 7, lines 1-14 of the present specification. As such, the amendment does not introduce new matter.

As noted above, Rider and Meinke fail, both alone and in combination, to disclose a controller (claim 2) that converts a data rate or data package size of a data source into a desired value of data rate or data package size, wherein the desired value of data rate or data package size is dynamically adapted by the controller based on a position of the first and second units relative to each other or based on a point of time. For at least the same reasons, Rider and Meinke cannot be relied upon to disclose a method (claim 8), whereby a serial data stream is controlled at least in part by dynamically adapting a data rate or data package size of the serial data stream into a desired value of data rate or data package size based on a position of the first and second units relative to each other or based on a point of time. As a consequence, Rider and Meinke cannot be relied upon for disclosing all limitations of present claim 8.

For at least the reasons set forth above, Rider fails to provide teaching or suggestion for all limitations recited in present claims 2 and 8. In addition, the teachings of Meinke cannot be combined with those of Rider to overcome the deficiencies therein. Moreover, the deficiencies of Rider and Meinke cannot be remedied by Richley, Waters or Marchetto. As a result, present claims 2 and 8, as well as claims dependent therefrom, are patentably distinct over the teachings of the cited art. Accordingly, Applicants respectfully request removal of this rejection.

Patentability of Added Claims

Claims 13-14 are added in the present response. Support for the added claims may be found in originally filed claim 2, Fig. 1, and in the originally filed specification, e.g., on page 5.

Like claim 2, the system recited in claim 13 includes a first unit and a second unit, which is mobile along a predetermined path relative to said first unit, via non-contacting rotary joints, wherein the first unit comprises: a data source for generating a serial data stream; a transmitter for generating electrical signals from said serial data stream from said data source; a controller coupled between said data source and said transmitter for controlling said serial

data stream by converting a data rate or data package size of said data source into a desired value of data rate or data package size; and a transmitter conductor array for conducting said electrical signals generated by said transmitter.

In addition to the features recited in claim 2, claim 13 specifies that the transmitter conductor array defines a transmission path between the transmitter of the first unit and a receiving antenna of the second unit, wherein the transmission path is subdivided into segments, and wherein said electrical signals are conducted exclusively at positions where segments of the transmission path are present. None of the art cited in the final Office Action provides teaching or suggestion for such a transmitter conductor array. Therefore, Applicants contend that claims 13-14 are patentably distinct over the teachings of the cited art.

CONCLUSION

The present amendment is in response to the final Office Action mailed July 19, 2010. In view of the amendments and remarks herein, Applicants assert that pending claims 2 and 4-14 are in condition for allowance. If the Examiner has any questions, comments, or suggestions, the undersigned attorney earnestly requests a telephone conference.

No fees are required for filing this amendment; however, the Commissioner is authorized to charge any additional fees which may be required, or credit any overpayment, to Daffer McDaniel, LLP Deposit Account No. 50-3268.

Respectfully submitted,

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